



**BOROUGH OF KINGSTON, PENNSYLVANIA
MUNICIPAL SEPARATE STORM
SEWER SYSTEM (MS4) PROGRAM
INSPECTION REPORT**

BOROUGH OF KINGSTON
500 WYOMING AVENUE
KINGSTON, PENNSYLVANIA 18704

Report Date: September 17, 2014

Field Activity Dates: July 29–30, 2014

**U.S. Environmental Protection Agency, Region III
Water Protection Division
Office of NPDES Enforcement (3WP42)
1650 Arch Street
Philadelphia, PA 19103**

(This page intentionally left blank.)

DOCUMENTS CITED IN REPORT

Shortened Name	Document Title and Date
Borough NOI	Notice of Intent for coverage under the Permit, submitted by the Borough on September 10, 2012
Permit	<i>National Pollutant Discharge Elimination System (NPDES), Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4s), General Discharge Permit (PAG-13)</i>

ACRONYMS AND ABBREVIATIONS USED IN REPORT

Acronym or Abbreviation	Corresponding Term
BMP	best management practice
CCD	county conservation districts
COG	Council of Governments
CSO	combined sewer overflow
DEP	Pennsylvania Department of Environmental Protection
DPW	Department of Public Works
E&S	erosion and sediment
EPA	[United States] Environmental Protection Agency
GIS	geographic information system
IDD&E	illicit discharge detection and elimination
MCM	minimum control measure
MEP	maximum extent practicable
MOU	memorandum of understanding
MS4	municipal separate storm sewer system
NOI	notice of intent
NPDES	National Pollutant Discharge Elimination System
O&M	operation and maintenance
PCSM	post-construction stormwater management
QLP	qualifying local program
SOP	standard operating procedure
SSO	storm sewer outfall
SWMP	stormwater management program
WVSA	Wyoming Valley Sanitary Authority

EXECUTIVE SUMMARY

From July 29 through 30, 2014, a compliance inspection team composed of staff from the U.S. Environmental Protection Agency (EPA) Region III and EPA's contractor, PG Environmental, LLC, (collectively the EPA Inspection Team) inspected the municipal separate storm sewer system (MS4) program of the Borough of Kingston, Pennsylvania (the Borough).

Discharges from the Borough's MS4 are regulated by the Pennsylvania Department of Environmental Protection (DEP) *National Pollutant Discharge Elimination System (NPDES), Stormwater Discharges from Small Municipal Separate Storm Sewer Systems General Permit (PAG-13)* No. PAG-132268 (the Permit). The Borough submitted its Notice of Intent (NOI) for coverage under the Permit on September 10, 2012, and received notice of approval from DEP on February 1, 2013. The Permit is set to expire on March 15, 2018.

The purpose of this inspection was to obtain information to assist EPA in assessing the Borough's compliance with the requirements of the Permit, as well as the implementation status of its current MS4 program.

Based on the information obtained and reviewed, the EPA Inspection Team made several observations concerning the Borough's MS4 program related to the specific Permit requirements evaluated. Table 1 summarizes the Permit requirements and the observations made by the inspection team.

Table 1. Summary of Permit Requirements and Inspection Observations

Permit Requirement	Observations
Permit Part C.3.a – Chesapeake Bay Pollutant Reduction Plan	Observation 1. At the time of the inspection, Borough representatives explained the Borough had not completed or submitted to DEP its Chesapeake Bay Pollutant Reduction Plan.
Appendix A, MCM #1 – Public Education and Outreach on Stormwater Impacts	Observation 2. At the time of the inspection, it did not appear that the Borough had developed, implemented, and maintained a written public education and outreach program. Observation 3. At the time of the inspection, it did not appear that the Borough had developed and maintained a list of target audience groups served by the MS4. Observation 4. At the time of the inspection, it did not appear that the Borough was distributing stormwater education materials through at least two distribution methods in addition to its Web site.
Appendix A, MCM #3 – Illicit Discharge Detection and Elimination (IDD&E)	Observation 5. At the time of the inspection, it did not appear that the Borough had developed and implemented a written program for detection, elimination, and prevention of illicit discharges. Observation 6. Borough representatives stated that the Borough, in conjunction with its consultant, had developed a geographic information system (GIS) based map displaying outfalls from its MS4 as well as receiving waters; however, at the time of the inspection, the map

Permit Requirement	Observations
	<p>did not appear to accurately identify the MS4 outfall locations. In addition, the map did not appear to identify the location of inlets, piping, swales, catch basins, channels, and basins.</p> <p>Observation 7. At the time of the inspection, it did not appear that the Borough had conducted or documented outfall field screening for IDD&E. The EPA Inspection Team observed dry weather flow from Outfall Nos. 5 and 7 during field activities conducted as a component of the inspection. Site observations are described in the body of this report.</p> <p>Observation 8. At the time of the inspection, it did not appear that the Borough had provided educational outreach to public employees, business owners, or the general public regarding a program to detect and eliminate illicit discharges.</p>
Appendix A, MCM #4 – Construction Site Stormwater Runoff Control	<p>Observation 9. At the time of the inspection, it did not appear that the Borough had a formal agreement or memorandum of understanding (MOU) with the Luzerne County Conservation District (Luzerne CCD) to ensure that MCM #4—Construction Site Stormwater Runoff Control—was implemented as outlined in the Permit. Several deficiencies related to erosion and sediment control were observed at an active private construction site within the Borough. Site observations are described in the body of this report.</p>
Appendix A, MCM #5 – Post-Construction Stormwater Management (PCSM) in New and Re-Development Activities	<p>Observation 10. At the time of the inspection, it did not appear that the Borough had a formal agreement or MOU with the Luzerne CCD to ensure that the applicable components of MCM #5—Post-Construction Stormwater Management (PCSM) in New and Re-Development Activities—were implemented as outlined in the Permit.</p> <p>Observation 11. At the time of the inspection, it did not appear that the Borough had developed an inventory, including the BMP attributes described in the Permit, for PCSM BMPs within its jurisdiction.</p> <p>Observation 12. At the time of the inspection, it did not appear that the Borough had developed a written inspection program or tracking mechanism to ensure long-term O&M for PCSM BMPs within its jurisdiction.</p>

Permit Requirement	Observations
Appendix A, MCM #6 – Pollution Prevention/Good Housekeeping for Municipal Operations	<p>Observation 13. At the time of the inspection, it did not appear that the Borough had developed a list or inventory of facilities and activities operated and maintained by the Borough that may contribute pollutants to the stormwater runoff to the MS4.</p> <p>Observation 14. At the time of the inspection, it did not appear that the Borough had developed or implemented a written O&M program for Borough facilities and operations that may contribute pollutants to stormwater runoff and ultimately to the discharge from the MS4.</p> <p>Observation 15. During a site visit to the DPW Maintenance Facility, the EPA Inspection Team observed multiple deficiencies related to stormwater pollution prevention and good housekeeping at the facility.</p> <p>Observation 16. At the time of the inspection, it did not appear that the Borough had developed and implemented a formal employee training program that addressed preventing or reducing the discharge of pollutants from municipal operations and activities to the MS4.</p>

TABLE OF CONTENTS

	Page
INTRODUCTION	2
BOROUGH OF KINGSTON BACKGROUND.....	3
INFORMATION OBTAINED RELATIVE TO PERMIT REQUIREMENTS	4
PERMIT PART C.3: CHESAPEAKE BAY POLLUTANT REDUCTION PLAN	4
Permit Part C.3.a	4
MINIMUM CONTROL MEASURE 1: PUBLIC EDUCATION AND OUTREACH ON STORMWATER IMPACTS	5
Appendix A, MCM #1, BMP #1	5
Appendix A, MCM #1, BMP #2.....	5
Appendix A, MCM #1, BMP #3.....	5
Appendix A, MCM #1, BMP #4.....	5
MINIMUM CONTROL MEASURE 3: ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDD&E).....	6
Appendix A, MCM #3, BMP #1	6
Appendix A, MCM #3, BMP #2.....	7
Appendix A, MCM #3, BMP #3.....	7
Appendix A, MCM #3, BMP #4.....	8
Appendix A, MCM #3, BMP #6.....	10
MINIMUM CONTROL MEASURE 4: CONSTRUCTION SITE STORMWATER RUNOFF CONTROL	10
Appendix A, MCM #4	11
MINIMUM CONTROL MEASURE 5: POST-CONSTRUCTION STORMWATER MANAGEMENT (PCSM) IN NEW AND RE-DEVELOPMENT ACTIVITIES	12
Appendix A, MCM #5	12
Appendix A, MCM #5, BMP #6.....	13
MINIMUM CONTROL MEASURE 6: POLLUTION PREVENTION/GOOD HOUSEKEEPING for MUNICIPAL OPERATIONS	15
Appendix A, MCM #6, BMP #1.....	15
Appendix A, MCM #6, BMP #2.....	15
Appendix A, MCM #6, BMP #3.....	18

- Appendix 1: Pennsylvania Department of Environmental Protection (DEP) *National Pollutant Discharge Elimination System (NPDES), Stormwater Discharges from Small Municipal Separate Storm Sewer Systems General Permit (PAG-13)*
- Appendix 2: Borough NOI for MS4 Program (September 2012)
- Appendix 3: Inspection Schedule
- Appendix 4: Inspection Sign-In Sheet
- Appendix 5: Exhibit Log
- Appendix 6: Photograph Log
- Appendix 7: Document Log

INTRODUCTION

From July 29 through 30, 2014, a compliance inspection team composed of staff from U.S. Environmental Protection Agency (EPA) Region III and EPA's contractor, PG Environmental, LLC, (collectively the EPA Inspection Team) inspected the municipal separate storm sewer system (MS4) program of the Borough of Kingston, Pennsylvania (the Borough). The purpose of this inspection was to obtain information to assist EPA in assessing the Borough's compliance with the requirements of the Permit as well as the implementation status of its current MS4 program. Dry weather conditions were experienced during field activities conducted as a component of the inspection.

Appendices 1 and 2 of this report contain copies of the Permit and the Borough's latest Notice of Intent (NOI), respectively. Part A.2.a of the Permit requires permittees to "implement, enforce and report on the Stormwater Management Program (SWMP) as set forth in Appendix A, designed to reduce the discharge of pollutants from the regulated small MS4s to the MEP [maximum extent practicable], to protect water quality and quantity, and to satisfy the appropriate water quality requirements of the Clean Water Act, the Pennsylvania Clean Streams Law, and regulations promulgated thereto." The SWMP outlines DEP's approved best management practices (BMPs) and measurable goals for the six federal minimum control measures (MCMs). In this report, readers should interpret the term "Permit" to include the SWMP.

The EPA Inspection Team obtained its information through a series of interviews with representatives from the Borough and the Borough's engineering consultant, Borton Lawson Engineering (Borough Engineering Consultant), along with a series of site visits, record reviews, and field verification activities. The inspection schedule is presented in Appendix 3. The following primary representatives were involved in the inspection:

Borough Representatives:	Mr. Adam Gober, Director of Public Works Ms. Julie Norton, Municipal Secretary Mr. Terence Ostrowski, Municipal Engineer, Borton Lawson Engineering
EPA Representatives:	Mr. Andy Dinsmore, EPA Region III Ms. Rebecca Crane, EPA Region III
DEP Representatives:	Mr. Paul Grella, Environmental Engineer, Northeast Regional Office Mr. Brian Burden, Environmental Engineer, Northeast Regional Office Mr. Jeff Hartman, Water Quality Specialist, Northeast Regional Office Mr. Mike Hickman, South Central Regional Office, Environmental Engineering Specialist Mr. Leif Rowles, Environmental Engineer, Central Office
EPA Contractors:	Mr. Bobby Jacobsen, PG Environmental, LLC Mr. Jared Richardson, PG Environmental, LLC

A sign-in sheet from the onsite inspection is included as Appendix 4.

BOROUGH OF KINGSTON BACKGROUND

The Borough, which is in Luzerne County, encompasses approximately 2.2 square miles; the total population of the Borough was 13,182 according to the 2010 U.S. Census. According to Borough representatives, the Borough started its MS4 program in 2003 and was in its second MS4 permit cycle at the time of the inspection. Borough representatives stated the Borough's sewer system was completely separate (i.e., no areas of combined sewers). The Borough operates and maintains its own sanitary sewer collection system, which conveys sewage to the Wyoming Valley Sanitary Authority (WVSA) for treatment. During the onsite inspection, the EPA Inspection Team noted discrepancies between the Borough's mapping and the potential existence of combined sewers within the Borough that were mentioned during discussions with WVSA staff. Observations regarding this issue are presented below in the appropriate sections of the report.

Borough representatives stated the Borough maintained about 13 outfalls and 5 stormwater pump stations within its MS4 at the time of the inspection. The Borough's Engineering Consultant stated most of the MS4 outfalls discharge to the Susquehanna River, and one or two may discharge to Toby's Run, a receiving water which flows primarily underground through the Borough.

The Director of Public Works explained the Borough's stormwater program was funded through the Borough's general fund, and there was not an established stormwater utility fee. Borough representatives stated there was not a specific budget for the stormwater program, as the activities are typically completed based on needs identified during each year. At the time of the inspection, the Director of Public Works stated the Borough did not have any long-term capital improvement projects planned for the MS4. The Director of Public Works stated there were 12 to 15 full-time employees in the Department of Public Works (DPW) at the time of the inspection, and additional temporary employees filled in as needed.

According to Borough staff, the Borough adopted a stormwater management ordinance in April 2004. Borough staff explained the ordinance was based on the Luzerne County ordinance (which was based on DEP's sample ordinance) and includes requirements regarding illicit discharges, construction runoff, post-construction runoff, and drainage connections.

The Director of Public Works explained the Borough was a member of the West Side Council of Governments (COG), which involved 17 nearby municipalities. He explained the entity was in its infancy at the time of the inspection, but had already purchased shared equipment (i.e., street sweeper, combination vacuum/jetter truck, and asphalt recycler), which was stored and maintained by the Borough. During the inspection DEP and EPA representatives discussed the possibility of the West Side COG becoming a resource for regional guidance and implementation for aspects of the MS4 program (e.g., public education and outreach).

INFORMATION OBTAINED RELATIVE TO PERMIT REQUIREMENTS

The EPA Inspection Team obtained documentation and other supporting information to evaluate compliance with the Permit prior to, during, and after meeting with Borough staff during the onsite inspection. Observations regarding the Borough's implementation of Permit requirements are presented in this report. The presentation of inspection observations in this report does not constitute a formal compliance determination or notice of violation.

Referenced documentation used as supporting information is provided in Appendix 5, Exhibit Log, and photograph documentation is provided in Appendix 6, Photograph Log. A complete list of documents obtained is provided in Appendix 7, Document Log.

On June 14, 2014, the EPA Inspection Team formally provided the Borough with a written list of requested records pertaining to its MS4 program (see Appendix 5, Exhibit 1). During the onsite inspection the Borough provided the EPA Inspection Team with a completed table which identifies the information provided or made available by the Borough pertaining to each requested item (see Appendix 5, Exhibit 2).

This report describes and outlines specific Permit requirements and associated observations made during the inspection. The format of the report follows the numeric system used in the Permit and is sequential. Sections of the Permit are restated with observations concerning those requirements listed below.

PERMIT PART C.3: CHESAPEAKE BAY POLLUTANT REDUCTION PLAN

Permit Part C.3.a—"Within 12 months of the effective date of your Approval of General Permit Coverage, develop and submit to the Department for approval a Chesapeake Bay Pollutant Reduction Plan, including a schedule, to implement BMPs to reduce nitrogen, phosphorus, and sediment associated with existing stormwater discharges into regulated small MS4s discharging to receiving waters tributary to the Chesapeake Bay."

Permit Parts 3.b–g include specific requirements for the content and schedule of the Chesapeake Bay Pollutant Reduction Plan.

Observation 1: At the time of the inspection, Borough representatives explained the Borough did not have a completed Chesapeake Bay Pollutant Reduction Plan. The Director of Public Works and the Borough's Engineering Consultant explained the plan was being developed, but they did not have a planned completion or submittal date. Borough representatives estimated the plan may be completed and submitted within approximately one month of EPA's onsite MS4 inspection.

MINIMUM CONTROL MEASURE 1: PUBLIC EDUCATION AND OUTREACH ON STORMWATER IMPACTS

Appendix A, MCM #1, BMP #1—“Develop, implement and maintain a written Public Education and Outreach Program.”

Observation 2: At the time of the inspection, it did not appear that the Borough had developed, implemented, and maintained a written public education and outreach program. Upon formal request by the EPA Inspection Team for the Borough’s written public education and outreach program, the Director of Public Works stated that the Borough had not developed a written plan or program for this aspect of the MS4 program.

Appendix A, MCM #1, BMP #2—“Develop and maintain lists of target audience groups that are present within the areas served by your regulated small MS4s. In most communities, the target audiences shall include residents, businesses (including commercial, industrial and retailers), developers, schools, and municipal employees.”

Observation 3: At the time of the inspection, it did not appear that the Borough had developed and maintained a list of target audience groups served by the MS4. Upon formal request by the EPA Inspection Team for a list of target audience groups for public education and outreach regarding stormwater, Borough representatives stated they did not have a specific list of audience groups.

Appendix A, MCM #1, BMP #3—“You must annually publish at least one issue of a newsletter, a pamphlet, a flyer, or a web site that includes general stormwater educational information, a general description of your Stormwater Management Program, and/or information about your stormwater management activities. The list of publications and the content of the publications must be reviewed and updated at least once during each year of permit coverage. Publications should include a list of references (or links) to refer the reader to additional information (e.g., PA DEP and US EPA stormwater websites, and any other sources that will be helpful to readers). You must implement at least one of the following alternatives:

- a. Publish and distribute in printed form a newsletter, a pamphlet or a flyer containing information consistent with this BMP.
- b. Publish educational and informational items including links to DEP’s and EPA’s stormwater websites on your municipal website.”

Appendix A, MCM #1, BMP #4—“Distribute stormwater educational materials and/or information to the target audiences using a variety of distribution methods, including but not limited to: displays, posters, signs, pamphlets, booklets, brochures, radio, local cable TV, newspaper articles, other advertisements (e.g., at bus and train stops/stations), bill stuffers, posters, presentations, conferences, meetings, fact sheets, giveaways, storm drain stenciling.”

The measureable goal associated with this BMP states, “All permittees shall select and utilize at least two distribution methods in each permit year. These are in addition to the newsletter and website provisions of BMPs #3 and #4.”

Observation 4: At the time of the inspection, it did not appear that the Borough was distributing stormwater education materials through at least two distribution methods in addition to its Web site.

Borough representatives explained the Borough maintained a page titled “MS4 Program (Water Drainage)” on the Borough’s Web site. This page describes the purpose of the MS4 program and provides links to DEP educational materials regarding stormwater. Borough representatives did not indicate when or how they update the Web site.

In addition, Borough representatives explained the Borough annually distributes a printed newsletter to each residential address within its jurisdiction. The newsletter typically covers a variety of topics, including street sweeping schedules and pet waste disposal, but does not necessarily provide education and outreach regarding stormwater. Appendix 5, Exhibit 3 is an example of a newsletter provided by the Borough during the inspection. Borough representatives stated they did not think the newsletter was distributed to businesses and the Director of Public Works confirmed the Borough did not conduct stormwater-related outreach to Borough schools.

Borough representatives did not describe additional methods of distribution for education materials regarding stormwater.

MINIMUM CONTROL MEASURE 3: ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDD&E)

Appendix A, MCM #3, BMP #1—The Permit requires the Borough to “develop and implement a written program for the detection, elimination, and prevention of illicit discharges into your regulated MS4s. Your program shall include dry weather field screening of outfalls for nonstormwater flows, and sampling of dry weather discharges for selected chemical and biological parameters. Test results shall be used as indicators of possible discharge sources. The program shall include the following:

- Procedures for identifying priority areas. These are areas with a higher likelihood of illicit discharges, illicit connections or illegal dumping. Priority areas may include areas with older infrastructure, a concentration of high-risk activities, or past history of water pollution problems.
- Procedures for screening outfalls in priority areas during varying seasonal and meteorological conditions.
- Procedures for identifying the source of an illicit discharge when a contaminated flow is detected at a regulated small MS4 outfall.
- Procedures for eliminating an illicit discharge.

- Procedures for assessing the potential for illicit discharges caused by the interaction of sewage disposal systems (e.g., on-lot septic systems, sanitary piping) with storm drain systems.
- Mechanisms for gaining access to private property to inspect outfalls (e.g., land easements, consent agreements, search warrants).
- Procedures for program documentation, evaluation and assessment.”

Observation 5: At the time of the inspection, it did not appear that the Borough had developed and implemented a written program for detection, elimination, and prevention of illicit discharges. Upon formal request by the EPA Inspection Team for a copy of the Borough’s written IDD&E program, Borough representatives stated that a written IDD&E program and/or formal standard operating procedures (SOPs) had not been developed.

Appendix A, MCM #3, BMP #2—“Develop and maintain a map of your regulated small MS4. The map must also show the location of all outfalls and the locations and names of all surface waters of the Commonwealth (e.g., creek, stream, pond, lake, basin, swale, channel) that receive discharges from those outfalls.”

Appendix A, MCM #3, BMP #3—“In conjunction with the map(s) created under BMP #2 (either on the same map or on a different map), new permittees shall show, and renewal permittees shall update, the entire storm sewer collection system, including roads, inlets, piping, swales, catch basins, channels, basins, and any other features of the permittee’s storm sewer system including municipal boundaries and/or watershed boundaries.”

Observation 6: Borough representatives stated that the Borough, in conjunction with its consultant, had developed a geographic information system (GIS) based map displaying outfalls from its MS4 as well as receiving waters; however, at the time of the inspection, the map did not appear to accurately identify the MS4 outfall locations. In addition, the map did not appear to identify the location of inlets, piping, swales, catch basins, channels, and basins.

According to the Borough’s Engineering Consultant, the GIS-based map was created in 2003 and updated in 2013. The Borough did not have in-house GIS capabilities at the time of the inspection; therefore, the Borough’s Engineering Consultant maintained the mapping information offsite on behalf of the Borough. Borough representatives explained that the Borough maintains a separate hardcopy map of the storm sewer system (originally from the 1950s or 1960s) and as-built plans displaying sections of the MS4.

During the onsite inspection, the EPA Inspection Team reviewed a printed copy of the GIS-based map, dated March 8, 2004 and provided by the Borough’s Engineering Consultant. The map identified 13

“SSOs” (storm sewer outfalls) and the location of streams/rivers. The map did not identify the location of other MS4 assets such as inlets, piping, swales, catch basins, channels, and basins. Note that in this report, the “SSOs” identified on the map are referred to as “outfalls.”

Based on discussions with Borough and DEP representatives, it appeared that 11 of the identified outfalls were either located outside of Kingston’s boundaries or conveyed stormwater flow from other entities. Table 2 provides a summary of the outfall numbers and descriptions based on information provided by Borough representatives.

WVSA staff interviewed during a site visit to Kingston Outfall No. 5 explained they believed there were areas of combined sewer within the Borough of Kingston, though the system was mostly separate. WVSA staff was unsure of the exact combined sewer locations at the time of the site visit, but they stated they would identify the combined sewer areas by hand on a hardcopy map and provide it to the Borough and EPA after the inspection; however, at the time this report was written the map had not been provided to EPA.

Table 2. Summary of Outfall Locations and Stormwater Sources

Outfall Nos.	Description
1, 2, and 3	Located within Kingston and convey stormwater from an adjacent Pennsylvania Department of Transportation (PennDOT) highway to the Susquehanna Pond.
4	Located within Kingston but conveys stormwater from Forty Fort Borough and Cross Valley Borough.
5	Located within Kingston in an area adjacent to the Church Street Pump Station and conveys stormwater from the Kingston MS4.
6 and 7	Located outside of Kingston in the City of Wilkes-Barre but convey stormwater from the Kingston MS4.
8, 9, 10, and 11	Located outside of Kingston and convey stormwater from the Kingston MS4, Edwardsville Borough, and Pringle Borough.
12	Located within Kingston and discharges stormwater from the Kingston MS4 to an underground portion of Toby’s Creek, which is not visible from street level.
13	Located outside Kingston and discharges stormwater from Pringle Borough and Luzerne Borough to a Toby’s Creek impounding basin located in Pringle Borough.

Appendix A, MCM #3, BMP #4— “Following the IDD&E program created pursuant to BMP #1, the permittee shall conduct outfall field screening, identify the source of any illicit discharges, and remove or correct any illicit discharges using procedures developed under BMP #1.” Further, the Permit-defined measureable goal for this BMP states, “For

renewal permittees, each of the identified regulated small MS4 outfalls shall be screened at least once during each permit coverage term. For areas where past problems have been reported or known sources of dry weather flows occur on a continual basis, outfalls shall be screened annually.”

Observation 7: At the time of the inspection, it did not appear that the Borough had conducted or documented outfall field screening for IDD&E. As noted above, Borough representatives explained Kingston did not have a written program for IDD&E, including outfall field screening. The Director of Public Works explained he typically observes stormwater outfalls prior to or during large rainfall events to identify potential blockages or accumulated debris that may result in flooding. He explained the frequency of the outfall inspections occurs approximately biweekly, but it is dependent on the occurrence of storm events. The Director of Public Works further stated that he had not formally documented his outfall inspections. In addition, he stated that he had not observed suspect flows or evidence of potential illicit discharges during any of his previous outfall inspections.

The EPA Inspection Team observed dry weather flow from Outfall Nos. 5 and 7 during field activities conducted as a component of the inspection (see Appendix 6, Photographs 1 through 4). The Director of Public Works stated that he was unsure if Outfall No. 7 typically had flow during dry weather, but stated that Outfall No. 5 did typically have flow during dry weather, similar to the amount of flow observed by the EPA Inspection Team. Borough representatives stated they were unsure of the source of the flows and had not conducted previous evaluations to identify the source of the flows. Photographs of the outfalls from a previous site visit reported to be conducted in February 2004 by the Borough’s Engineering Consultant display flow at both Outfall Nos. 5 and 7 (see Appendix 5, Exhibit 4). It was unclear to the EPA Inspection Team if these site visits had been conducted during a dry weather period.

During the field visit to Outfall No. 7, the EPA Inspection Team observed a pipe with a WVSA combined sewer overflow (CSO) sign (“WVSA ID# 012”) adjacent to it (see Appendix 6, Photographs 5 through 7). Based on the placement of the sign it was initially unclear to the EPA Inspection Team which pipe the discharge sign was referring to—the identified Outfall No. 7 or the adjacent concrete pipe. While at the location, WVSA staff explained that the smaller concrete pipe in the foreground of Photograph 5 was the CSO location, which did not have flow at the time of the site visit. WVSA representatives were unsure of the source of the flow being discharged from Outfall No. 7, but said they had seen it flowing before and they believed it flowed constantly. During the site visit, Borough and WVSA staff collected a water sample to be analyzed by WVSA for fecal coliform.

WVSA and Borough staff stated the sample results would be shared with EPA after the inspection, but at the time this report was written the sample results had not been provided to EPA.

Appendix A, MCM #3, BMP #6—“Provide educational outreach to public employees, business owners and employees, property owners, the general public and elected officials (i.e., target audiences) about the program to detect and eliminate illicit discharges.

Educational outreach should include:

- Distribution of brochures and guidance for target audiences including schools;
- Programs to encourage and facilitate public reporting of illicit discharges;
- Organizing volunteers to locate and visually inspect outfalls and to stencil storm drains; and
- Implement and encourage recycling programs for common wastes such as motor oil, antifreeze and pesticides.”

The measureable goal associated with this BMP states, “During each year of permit coverage, appropriate educational information concerning illicit discharges shall be distributed to the target audiences using methods outlined under MCM #1. If not already established, set up and promote a stormwater pollution reporting mechanism (e.g., a complaint line with message recording) by the end of the first year of permit coverage for the public to use to notify you of illicit discharges, illegal dumping or outfall pollution. Respond to all complaints in a timely and appropriate manner. Document all responses, include the action taken, the time required to take the action, whether the complaint was resolved successfully.”

Observation 8: At the time of the inspection, it did not appear that the Borough had provided educational outreach to public employees, business owners, or the general public regarding a program to detect and eliminate illicit discharges. Borough representatives stated that aside from a “When it Rains it Drains” brochure link posted on the Borough’s Web site, the Borough had not developed or implemented any other educational outreach materials or programs regarding stormwater. Further, the Director of Public Works explained DPW staff had not been given specific training regarding stormwater awareness or illicit discharges.

MINIMUM CONTROL MEASURE 4: CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

The Permit fact sheet states, “DEP implements a state-wide erosion and sediment pollution control program applicable to any earth disturbance activity. In sixty-six of Pennsylvania’s sixty-seven counties, a significant portion of this program is delegated by DEP to county conservation districts (CCD) through a written delegation agreement. Under this statewide regulatory program, persons proposing or conducting earth disturbance activities are required to develop and implement an Erosion and Sediment Control Plan (“E&S Plan”) containing erosion and sediment (“E&S”) control BMPs which minimize the potential for accelerated erosion and sedimentation during

construction activities and post construction stormwater management (PCSM) after construction. This DEP statewide regulatory program and its associated E&S control and PCSM BMPs in MCM #4 (Construction Site Stormwater Runoff Control) and MCM #5 (Post Construction Stormwater Management) satisfy the qualifying local program (QLP) requirements established under federal regulation at 40 CFR §122.34(c).”

Appendix A, MCM #4—“If you checked Option MCM #4.A in Section E(4)-(5) of the NOI, then you are relying on DEP’s statewide QLP for issuing NPDES Permits for Stormwater Discharges Associated with Construction Activities to satisfy all requirements under this MCM #4 and under BMPs #1 through #3 of MCM #5; therefore, all requirements are met for both this MCM #4 and BMPs #1 through #3 of MCM #5.”

The Borough selected Option MCM #4.A in section E(4)–(5) of the NOI (see Appendix 2), which states, “The permittee will rely on DEP’s statewide program for issuing NPDES Permits for Stormwater Discharges Associated with Construction Activities to satisfy all requirements under MCM #4 and all requirements under BMPs #1 through #3 of MCM #5. In this case, the permittee is not required as a condition of this permit to implement any of the BMPs listed under MCM #4 nor any of the first three (3) BMPs listed under MCM #5 in Appendix A of the Authorization to Discharge.”

Observation 9: At the time of the inspection, it did not appear that the Borough had a formal agreement or memorandum of understanding (MOU) with the Luzerne County Conservation District (Luzerne CCD) to ensure that MCM #4—Construction Site Stormwater Runoff Control—was implemented as outlined in the Permit. Borough representatives indicated during discussions held at the time of the inspection that the Borough relied on the Luzerne CCD for construction site stormwater runoff control, including E&S issues, within the Borough’s municipal boundaries. However, the Director of Public Works stated he had not had any communication with the Luzerne CCD, and they did not provide him with information regarding construction site compliance and enforcement for E&S issues.

Part A.2.h of the Permit states, “Implementation of one or more of the minimum control measures may be shared with another entity, or the other entity may fully take over implementation of the measure. Because the permittee is responsible for meeting all permit conditions regardless of its delegations to other entities, the permittee should take steps to ensure that...The other entity agrees to implement the control measures on behalf of the permittee. The agreement between the parties shall be documented in writing and retained by the permittee with the SWMP and records for this general permit.”

During the onsite inspection, the EPA Inspection Team observed several deficiencies related to erosion and sediment control at an active private construction site within the Borough. Specifically, at the

Wyoming Seminary School Performing Arts Center Construction Project, the EPA Inspection Team observed the following:

- a. At the time of the inspection, BMPs for inlet protection were not provided for two of three storm drain inlets located in an unstabilized area near the intersection of West Hoyt Street and North Sprague Avenue (see Appendix 6, Photographs 8, 9, and 10). Evidence of erosion was present around the storm drain inlets and evidence of previous sediment discharges to one of the inlets was observed at the time of the site visit (see Appendix 6, Photograph 11). Another one of the storm drain inlets had a “Siltsack®” inlet protection BMP, which appeared to require maintenance to remove accumulated sediment (see Appendix 6, Photographs 12 and 13).
- b. At the time of the inspection, unstabilized areas were present between the sidewalk and the roadway along North Sprague Avenue (see Appendix 6, Photograph 14). In addition, multiple storm drain inlets along North Sprague Avenue and adjacent to the unstabilized area did not have BMPs for inlet protection, and accumulated sediment was present inside the catch basins (see Appendix 6, Photographs 15 through 18).
- c. At the time of the inspection, staining from an active petroleum product leak from a piece of heavy equipment was present on the impervious roadway surface of North Sprague Avenue, adjacent to a storm drain inlet (see Appendix 6, Photographs 19 and 20).
- d. At the time of the inspection, sediment from vehicle tracking onto North Sprague Avenue was observed at the active construction entrance (see Appendix 6, Photographs 21 and 22).
- e. Based on discussions with Borough staff, it appeared that Borough representatives generally lacked knowledge and understanding of construction site erosion and sediment control issues and did not have an established process for referring observed issues to the Luzerne CCD.

MINIMUM CONTROL MEASURE 5: POST-CONSTRUCTION STORMWATER MANAGEMENT (PCSM) IN NEW AND RE-DEVELOPMENT ACTIVITIES

Appendix A, MCM #5—“If you checked Option MCM #4.A in Section E(4)-(5) of the NOI, then you are relying on DEP’s statewide QLP for issuing NPDES Permits for Stormwater Discharges Associated with Construction Activities to satisfy all requirements under BMPs #1 through #3 of this MCM #5; therefore, all requirements are met for BMPs #1 through #3 of this MCM #5 and for all requirements under MCM #4.”

The Borough selected Option MCM #4.A in section E(4)–(5) of the NOI (see Appendix 2), which states, “The permittee will rely on DEP’s statewide program for issuing

NPDES Permits for Stormwater Discharges Associated with Construction Activities to satisfy all requirements under MCM #4 and all requirements under BMPs #1 through #3 of MCM #5. In this case, the permittee is not required as a condition of this permit to implement any of the BMPs listed under MCM #4 nor any of the first three (3) BMPs listed under MCM #5 in Appendix A of the Authorization to Discharge.”

Observation 10: At the time of the inspection, it did not appear that the Borough had a formal agreement or MOU with the Luzerne CCD to ensure that the applicable components of MCM #5–Post-Construction Stormwater Management (PCSM) in New and Re-Development Activities–were implemented as outlined in the Permit.

Permit Part A.2.h states, “Implementation of one or more of the minimum control measures may be shared with another entity, or the other entity may fully take over implementation of the measure. Because the permittee is responsible for meeting all permit conditions regardless of its delegations to other entities, the permittee should take steps to ensure that...The other entity agrees to implement the control measures on behalf of the permittee. The agreement between the parties shall be documented in writing and retained by the permittee with the SWMP and records for this general permit.”

Appendix A, MCM #5, BMP #6— “Ensure adequate operation and maintenance of all post-construction stormwater management BMPs installed at all qualifying development or redevelopment projects (including those owned or operated by the permittee).” This BMP contains two measureable goals:

- (1) “Within the first year of coverage under this permit, new permittees shall develop and implement a written inspection program to ensure that stormwater BMPs are properly operated and maintained. The program shall include sanctions and penalties for non-compliance. All permittees shall review and update the inspection program annually and shall continue to implement this BMP.”
- (2) “An inventory of PCSM BMPs shall be developed by permittees and shall be continually updated during the term of coverage under the permit as development projects are reviewed, approved, and constructed. This inventory shall include all PCSM BMPs installed since March 10, 2003 that discharge directly or indirectly to your regulated small MS4s. The inventory also should include PCSM BMPs discharging to the regulated small MS4 system [sic] that may cause or contribute to violation of water quality standards. The inventory shall include:
 - all PCSM BMPs that were installed to meet requirements in NPDES Permits for Stormwater Discharges Associated with Construction Activities approved since March 10, 2003.
 - the exact location of the PCSM BMP (e.g., street address);
 - information (e.g., name, address, phone number(s)) for BMP owner and entity responsible for BMP Operation and Maintenance (O&M), if different from BMP owner;

- the type of BMP and the year it was installed;
- maintenance required for the BMP type according to the Pennsylvania Stormwater BMP Manual or other manuals and resources;
- the actual inspection/maintenance activities for each BMP;
- an assessment by the permittee if proper operation and maintenance occurred during the year and if not, what actions the permittee has taken, or shall take, to address compliance with O&M requirements.”

The Permit further recommends that the Borough “develop a single system that supports recording and tracking the information specified in BMPs #3, #4 and #5 [of MCM #5].”

Observation 11: At the time of the inspection, it did not appear that the Borough had developed an inventory, including the BMP attributes described in the Permit, for PCSM BMPs within its jurisdiction. During a pre-inspection conference call, Borough representatives explained Kingston did not have an inventory of PCSM BMPs, and they were not aware of any publicly owned post-construction BMPs. They stated they were unsure whether there were any privately owned post-construction BMPs in the Borough, and they would have to review construction project records and as-built plans to determine this. Borough representatives estimated there may have been a total of about five construction projects with a disturbance greater than or equal to one acre within the past 10 years that may have required installation of a PCSM BMP.

During the onsite inspection, Borough representatives provided the EPA Inspection Team with a list titled “Land Development Reviews” (see [Appendix 5, Exhibit 5](#)), which identified five construction projects with land development planning reviews since 2011. Based on the list, four of these five projects included PCSM BMPs. The list included locations (though it was unclear if they were the project locations or BMP locations), but did not identify information about the BMPs, such as the owner and entity responsible for O&M, installation year, required maintenance, and previous inspection or maintenance activities.

During the onsite inspection, the EPA Inspection Team visited the location of three privately owned PCSM BMPs within the Borough (two at recently completed construction projects and one at an active construction project; see [Appendix 6, Photographs 23 through 26](#)).

Observation 12: At the time of the inspection, it did not appear that the Borough had developed a written inspection program or tracking mechanism to ensure long-term O&M for PCSM BMPs within its jurisdiction. Borough representatives stated that the Borough did not have a written inspection program and did not perform inspection or maintenance for

any PCSM BMPs. Borough staff was also not aware of the existence of any PCSM BMP maintenance agreements.

MINIMUM CONTROL MEASURE 6: POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

Appendix A, MCM #6, BMP #1—“Identify and document all facilities and activities that are owned or operated by the permittee and have the potential for generating stormwater runoff to the regulated small MS4. This includes activities conducted by contractors for the permittee. Activities may include the following: street sweeping; snow removal/deicing; inlet/outfall cleaning; lawn/grounds care; general storm sewer system inspections and maintenance/repairs; park and open space maintenance; municipal building maintenance; new construction and land disturbances; right-of-way maintenance; vehicle operation, fueling, washing and maintenance; and material transfer operations, including leaf/yard debris pickup and disposal procedures. Facilities can include streets; roads; highways; parking lots and other large paved surfaces; maintenance and storage yards; waste transfer stations; parks; fleet or maintenance shops; wastewater treatment plants; stormwater conveyances (open and closed pipe); riparian buffers; and stormwater storage or treatment units (e.g., basins, infiltration/filtering structures, constructed wetlands, etc.).”

The measureable goal associated with this BMP states, “By the end of the first year of permit coverage, new permittees shall identify and document all types of municipal operations, facilities and activities and land uses that may contribute to stormwater runoff within areas of municipal operations that discharge to the regulated small MS4. Renewal permittees should have completed this list during the previous permit term. For all permittees, this information shall be reviewed and updated each year of permit coverage, as needed. Part of this effort shall include maintaining a basic inventory of various municipal operations and facilities.”

Observation 13: At the time of the inspection, it did not appear that the Borough had developed a list or inventory of facilities and activities operated and maintained by the Borough that may contribute pollutants to the stormwater runoff to the MS4. Upon formal request by the EPA Inspection Team for a list or inventory of Borough facilities and activities with the potential for generating stormwater runoff to the MS4, Borough representatives explained that they had not formally documented these facilities or activities but there was one DPW maintenance facility, a fire department, and a police station within the Borough.

Appendix A, MCM #6, BMP #2—“Develop, implement and maintain a written operation and maintenance (O&M) program for all municipal operations and facilities that could contribute to the discharge of pollutants from the regulated small MS4s, as identified under BMP #1. This program (or programs) shall address municipally owned stormwater collection or conveyance systems, but could include other areas (as identified under BMP #1). The O&M program(s) should stress pollution prevention and good

housekeeping measures, contain site-specific information, and address the following areas:

- Management practices, policies, procedures, etc. shall be developed and implemented to reduce or prevent the discharge of pollutants to your regulated small MS4s. You should consider eliminating maintenance-area discharges from floor drains and other drains if they have the potential to discharge to storm sewers.
- Maintenance activities, maintenance schedules, and inspection procedures to reduce the potential for pollutants to reach your regulated small MS4s. You also should review your procedures for maintaining your stormwater BMPs.
- Controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, waste transfer stations, fleet or maintenance shops with outdoor storage areas, and salt / sand (anti-skid) storage locations and snow disposal areas.
- Procedures for the proper disposal of waste removed from your regulated small MS4s and your municipal operations, including dredge spoil, accumulated sediments, trash, household hazardous waste, used motor oil, and other debris.”

The measureable goal for BMP #2 of MCM #6 states, “All permittees shall review the O&M program annually, edit as necessary, and continue to implement during every year of permit coverage.”

Observation 14: At the time of the inspection, it did not appear that the Borough had developed or implemented a written O&M program for Borough facilities and operations that may contribute pollutants to stormwater runoff and ultimately to the discharge from the MS4. The EPA Inspection Team formally requested a written operation and maintenance program and procedures for all municipal operations and facilities that discharge to the MS4; however, the Borough did not provide the requested information. The Director of Public Works stated the Borough did not have written SOPs or a document describing municipal facilities or activities and applicable BMPs for stormwater pollution prevention. As noted above, the Borough did not have an inventory of municipal facilities and activities.

The Director of Public Works explained, at the time of the inspection, that the Borough typically performs storm drain inlet and pipe cleaning activities each fall after tree leaf cleanup is complete. He explained the Borough dispatches two crews with vactor trucks to clean storm drain inlets and pipes that require cleaning. The Director of Public Works explained the Borough did not have a formal work order system or other method to document which inlets or pipes segments were cleaned or to record the amount of debris removed. In addition, according to the Borough’s Director of Public Works, the Borough’s standard process for disposing of water collected by its combination vactor/jet truck during catch basin, inlet, and pipe cleaning operations

was to decant the water back into the storm sewer system downgradient of where the work was being performed. It should be noted that this activity would constitute an illicit discharge to the MS4.

The Director of Public Works explained, at the time of the inspection, that the Borough conducts street sweeping activities from about mid-April to mid-November each year. He explained the Borough sweeps nearly all of its roadway, about 45 miles, each week during that period. Borough representatives explained the amount of collected street sweeping material is not measured or recorded and is typically deposited in a stockpile at the DPW Maintenance Facility before being distributed for use in compost or as fill material; otherwise the facility disposes of it.

Observation 15: During a site visit to the DPW Maintenance Facility, the EPA Inspection Team observed multiple deficiencies related to stormwater pollution prevention and good housekeeping at the facility.

- a. At the time of the inspection, two storm drain inlets without BMPs for inlet protection were located approximately 50 feet to the northeast of the uncovered fueling area, and unstabilized material was present directly adjacent to the inlets (see Appendix 6, Photographs 27, 28, and 29).
- b. At the time of the inspection, staining from petroleum products was present on the impervious ground surface in the fueling area (see Appendix 6, Photographs 30 and 31).
- c. At the time of the inspection, a 5-gallon container of lacquer thinner, without coverage, containment, or its bung plug in place, was present in the fueling area (see Appendix 6, Photographs 32 and 33).
- d. At the time of the inspection, the container labeled “Oil Dry” in the fueling area contained used disposable gloves, trash, and standing water rather than fresh oil absorbent material (see Appendix 6, Photographs 34 and 35).
- e. At the time of the inspection, Borough representatives explained the floor drains in the vehicle maintenance building were connected to an onsite septic tank, but were unsure if the tank had a leach field associated with it or if material was only removed by a contracted waste hauler (see Appendix 6, Photographs 36 and 37).
- f. At the time of the inspection, waste oil was present on and adjacent to a waste oil storage tank at the facility (see Appendix 6, Photographs 38 and 39). Facility staff stated that public citizens could dispose of their waste oil in this location at the facility.

- g. At the time of the inspection, a battery was stored in an outdoor area, adjacent to the waste oil container (see Appendix 6, Photograph 40).
- h. At the time of the inspection, staining from what appeared to be petroleum products was present on the impervious ground surface adjacent to the southeastern side of the vehicle maintenance building (see Appendix 6, Photographs 41 and 42). This area was upgradient of a nearby storm drain inlet (see Appendix 6, Photographs 43 and 44).
- i. At the time of the inspection, a waste container for metal materials was uncovered and accumulated water with an oily sheen was present in the container (see Appendix 6, Photographs 45 and 46). In addition, staining was present on the ground surface adjacent to the container (see Appendix 6, Photographs 47 and 48).
- j. At the time of the inspection, a storm drain inlet without BMPs for inlet protection was present in an area of deteriorated pavement along the southeastern edge of the facility (see Appendix 6, Photograph 49).
- k. At the time of the inspection, salt and salt residue was present outside of and adjacent to the salt storage dome at the facility (see Appendix 6, Photographs 50 and 51). It should be noted that the salt dome showed signs of deterioration at the time of the inspection (see Appendix 6, Photographs 52 and 53).
- l. At the time of the inspection, a storm drain inlet without BMPs for inlet protection was present in a partially stabilized area along the southwest side of a vehicle storage building (see Appendix 6, Photograph 54). Sediment was present adjacent to and within the storm drain inlet (see Appendix 6, Photographs 55 and 56).

Appendix A, MCM #6, BMP #3—“Develop and implement an employee training program that addresses appropriate topics to further the goal of preventing or reducing the discharge of pollutants from municipal operations to your regulated small MS4s. The program may be developed and implemented using guidance and training materials that are available from federal, state or local agencies, or other organizations. Any municipal employee or contractor shall receive training. This could include public works staff, building / zoning / code enforcement staff, engineering staff (on-site and contracted), administrative staff, elected officials, police and fire responders, volunteers, and contracted personnel. Training topics should include operation, inspection, maintenance and repair activities associated with any of the municipal operations / facilities identified under BMP #1. Training should cover all relevant parts of the permittee’s overall stormwater management program that could affect municipal operations, such as

illicit discharge detection and elimination, construction sites, and ordinance requirements.”

There are two measureable goals for BMP #3 of MCM #6:

- (1) “During the first year of permit coverage, new permittees shall develop and implement a training program that identifies the training topics that will be covered, and what training methods and materials will be used. Renewal permittees shall continue to operate under their existing program. All permittees shall review the training program annually, edit it as necessary, and continue to implement it during every year of permit coverage.”
- (2) “Your employee training shall occur at least annually (i.e., during each permit coverage year) and shall be fully documented in writing and reported in your periodic reports. Documentation shall include the date(s) of the training, the names of attendees, the topics covered, and the training presenter(s). Guidance: The training requirements of this BMP can be met in various ways. Training can be:
 - formal or informal;
 - conducted on-site or off-site;
 - conducted on-the-job or during dedicated training periods;
 - conducted one-on-one or in a group setting (including with staff from other MS4s);
 - conducted by municipal staff or consultants/volunteers;
 - conducted via oral presentations/instructions and/or via written materials (e.g., SOP’s [sic], guidance manuals, tests).”

Observation 16: At the time of the inspection, it did not appear that the Borough had developed and implemented a formal employee training program that addressed preventing or reducing the discharge of pollutants from municipal operations and activities to the MS4. The Director of Public Works explained that DPW staff receives on-the-job training for operating and cleaning equipment, but the Borough had not developed a formal training program (annual or otherwise) regarding stormwater pollution prevention. He was unsure whether the Borough Fire Department conducted specific training activities related to stormwater pollution prevention.